Pearson BTEC Level 3 Nationals Certificate, Extended Certificate, Foundation Diploma, Diploma, Extended Diploma

INFORMATION TECHNOLOGY

UNIT 2: CREATING SYSTEMS TO MANAGE INFORMATION (PART S)

Window for supervised period:

Monday 13 May 2019 – Friday 17 May 2019

SUPERVISED HOURS: 10 hours plus your additional time allowance.

SET TASK BRIEF: TASK SCENARIO and TASK INSTRUCTIONS

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SET TASK BRIEF

YOU ARE ADVISED TO SPEND 15 MINUTES (PLUS YOUR ADDITIONAL TIME ALLOWANCE) READING THE TASK SCENARIO, TASK INSTRUCTIONS AND THE TASK ACTIVITIES YOU ARE TO COMPLETE. YOU MAY MAKE NOTES AND/OR HIGHLIGHT INFORMATION TO USE IN THE COMPLETION OF THE DOCUMENTS YOU NEED TO PRODUCE FOR YOUR TASK.

Task Scenario on the next page.

TASK SCENARIO

You have been asked to create a database for Sharebrook Estate and Safari Park.

The attractions include a private rail track. It has an old steam engine and two carriages that are used for events.

Evening Christmas events have been planned for 20 to 22 December 2019.

The database will record information about:
- events
- customers
- event sales.

There are two types of seat: seats without tables and seats with tables.

There are 56 seats without tables.

There are 40 seats with tables.

There must be at least one adult seat purchased with every sale.

A sale cannot exceed eight tickets.

Children's seats are 10% cheaper than the adult seat price.

Task Instructions on the next page.

TASK INSTRUCTIONS

You need to:

- **design a relational database structure that:**

    – **accepts the data provided**

    – **avoids unnecessary duplication of data**

    – **uses recognised naming conventions**

    – **ensures data integrity.**

- **provide accurate validation rules where appropriate.**

- **import the data from file 1906DATA.txt into your database structure.**

- **facilitate database input by producing an:**

    – **input form to register a new customer**

    – **input form to purchase seats if they are available. It should show the relevant event, customer and seat sale information. In addition it should show the total cost for adult tickets, the total cost for child tickets and the overall cost.**

● show the design view for:

- a query to display an alphabetically sorted list of customers from Dilmouth showing customer names and telephone numbers

- a query to update the town name of Lower Marsdon to Lower Marsden

- a query that would allow a user to enter the parameters event date and seat type. Display the event description, customer names and post codes

- a query to display the number of seats remaining for each event. It should show the event description, total adult seats sold, total child seats sold and the total number of seats remaining

- a report that shows customer sales information. It should display the forename and surname, number of adult seats bought and number of child seats bought for each customer. Calculate and display the total number of seats each customer has bought and the sales income this would generate, without any child discount. Calculate and display the overall number of seats sold and sales income without any child discount.

- **create a suitable user interface that provides a menu to access the queries and reports listed and the forms required for data entry.**

- **test your input forms including any calculations, validation and macros/code using appropriate test data (normal, erroneous and extreme).**

- **evaluate your database against the given scenario justifying:**

    - **how well your solution meets the requirements of the scenario**

    - **the quality, performance and usability of the database**

    - **the changes made during the development and testing process.**